

CLAIMS

1- Monoclonal antibody selected from monoclonal antibody 16D10, a fragment or derivative thereof, and an antibody which essentially binds to the same epitope as monoclonal antibody 16D10.

2- Antibody according to claim 1, wherein said antibody is humanized, chimeric or human.

3- Antibody according to either one of claims 1 or 2, wherein the antibody is of the IgG type.

4- Antibody according to either one of claims 1 or 2, wherein the antibody is a single chain antibody.

5- Use of an antibody according to any one of claims 1 to 4 for preparing a diagnostic composition which can be used for detecting a pancreatic pathology *in vivo* or *in vitro*.

6- Use according to claim 5, wherein the pancreatic pathology is pancreatic cancer.

7- Method of detection *in vitro* of a subject suffering from a pancreatic pathology, comprising contacting a biological sample from the subject with an antibody according to any one of claims 1 to 4 and detecting the formation of immunological complexes resulting from the immunological reaction between said antibody and said biological sample.

8- Method according to claim 7, wherein said biological sample is a sample of pancreatic tissue.

9- Method according to claim 7, wherein said biological sample is a biological fluid preferably selected from among pancreatic juices, serum and urine.

10- Method according to any one of claims 7 to 9, wherein the method enables the detection of a subject suffering from pancreatic cancer.

11- Kit for diagnosis of a pancreatic pathology, comprising an antibody according to any one of claims 1 to 4, and optionally the means for detecting the immunological complex resulting from the immunological reaction between the biological sample and said antibody.

12- Method of detection *in vitro* of a subject suffering from a pancreatic pathology, comprising recovering the urine of the subject, contacting said urine with an antibody which can specifically recognize a glycopeptide comprising 1 to 40 repetitions of the peptide sequence described in SEQ ID No 14 and glycosylated by one or more enzymes having ose-transferase activity selected in the group consisting of Core 2 β (1-6) N-acetylglucosaminyltransferase (C2GnT), fucosyltransferase FUT3 which has α (1-3) and α (1-4) fucosyltransferase activity, or fucosyltransferase FUT7 which has α (1-3) fucosyltransferase activity, and detecting the formation of immunological complexes resulting from the immunological reaction between said antibody and said urine.

13- Method according to claim 12, wherein said antibody is the antibody J28, a fragment or derivative thereof, or an antibody which essentially binds to the same epitope or determinant as the former.

14- Method according to claim 12, wherein said antibody is the antibody 16D10, a fragment or derivative thereof, or an antibody which essentially binds to the same epitope or determinant as the former.

15- Method according to any one of claims 12 to 14, wherein the method enables the detection of a subject suffering from pancreatic cancer.

16- Pharmaceutical or vaccine composition comprising a glycopeptide comprising 1 to 40 repetitions of the peptide sequence described in SEQ ID No 14 and glycosylated by one or more enzymes having ose-transferase activity selected in the group consisting of Core 2 β (1-6) N-acetylglucosaminyltransferase (C2GnT), fucosyltransferase FUT3 which has α (1-3) and α (1-4) fucosyltransferase activity, or fucosyltransferase FUT7 which has α (1-3) fucosyltransferase activity.

17- Pharmaceutical or vaccine composition according to claim 16, wherein said glycopeptide is glycosylated by the enzymes C2GnT and FUT3.

18- Pharmaceutical or vaccine composition according to claim 16, wherein said glycopeptide is glycosylated by the enzymes C2GnT and FUT7.

5 19- Pharmaceutical or vaccinal composition according to claim 16, wherein said glycopeptide is glycosylated by the enzymes C2GnT, FUT3 and FUT7.

20- Pharmaceutical or vaccine composition according to any one of claims 16 to 19, wherein said glycopeptide is further glycosylated by $\alpha(1-3)$ galactosyltransferase (GT).
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21- Pharmaceutical or vaccine composition according to any one of claims 16 to 20, wherein said glycopeptide comprises between 1 and 15 of said repetitions.

15 22- Pharmaceutical or vaccine composition according to any one of claims 16 to 21, wherein said glycopeptide is recombinant.

23- Pharmaceutical or vaccine composition according to any one of claims 16 to 22, wherein said glycopeptide is purified from a biological fluid.
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24- Pharmaceutical or vaccine composition according to claim 23, wherein said biological fluid is urine.

25- Pharmaceutical or vaccine composition according to claim 24, wherein said urine originates from a subject suffering from a pancreatic pathology.
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26- Pharmaceutical or vaccine composition according to claim 25, wherein said urine originates from a subject suffering from pancreatic cancer.

30 27- Pharmaceutical or vaccine composition according to any one of claims 16 to 26, wherein said glycopeptide is loaded on antigen-presenting cells.

28- Pharmaceutical or vaccine composition according to claim 27, wherein the antigen-presenting cells are dendritic cells.
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29- Use of a pharmaceutical composition according to any one of claims 16

to 28 for preparing a medicament intended for the preventive or curative treatment of a pancreatic disease.

5 30- Use according to claim 29, wherein the pancreatic disease is pancreatic cancer.

 31- Pharmaceutical composition comprising an antibody which can specifically recognize a glycopeptide comprising 1 to 40 repetitions of the peptide sequence described in SEQ ID No 14 and glycosylated by one or more enzymes having
10 ose-transferase activity selected in the group consisting of Core 2 β (1-6) N-acetylglucosaminyltransferase (C2GnT), fucosyltransferase FUT3 which has α (1-3) and α (1-4) fucosyltransferase activity, or fucosyltransferase FUT7 which has α (1-3) fucosyltransferase activity.

15 32- Pharmaceutical composition according to claim 31, wherein said glycopeptide is glycosylated by the enzymes C2GnT and FUT3.

 33- Pharmaceutical composition according to claim 31, wherein said glycopeptide is glycosylated by the enzymes C2GnT and FUT7.

20 34- Pharmaceutical composition according to claim 31, wherein said glycopeptide is glycosylated by the enzymes C2GnT, FUT3 and FUT7.

25 35- Pharmaceutical composition according to any one of claims 31 to 34, wherein said glycopeptide comprises between 1 and 15 of said repetitions.

 36- Pharmaceutical composition according to any one of claims 31 to 35, wherein said antibody is the antibody J28, a fragment or derivative thereof, or an antibody which essentially binds to the same epitope or determinant as the former.

30 37- Pharmaceutical composition according to any one of claims 31 to 35, wherein said antibody is the antibody 16D10, a fragment or derivative thereof, or an antibody which essentially binds to the same epitope or determinant as the former.

35 38- Use of a pharmaceutical composition according to any one of claims 31 to 37, for preparing a medicament intended for the preventive or curative treatment of a

pancreatic disease.

39- Use according to claim 38, wherein the pancreatic disease is pancreatic cancer.

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40- Recombinant, isolated or purified glycopeptide comprising 1 to 40 repetitions of the peptide sequence described in SEQ ID No 14 and glycosylated by one or more enzymes having ose-transferase activity selected in the group consisting of Core 2 β (1-6) N-acetylglucosaminyltransferase (C2GnT), fucosyltransferase FUT3 which has α (1-3) and α (1-4) fucosyltransferase activity, or fucosyltransferase FUT7 which has α (1-3) fucosyltransferase activity, said glycopeptide being further glycosylated by α (1-3)galactosyltransferase (GT).

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